

# **Freight Financing Options for National Freight Productivity**

## ■ **Introduction**

Over the last 10 years, the nation's explosive economic growth has fueled a dramatic increase in demand for freight transportation services. The volume of freight being transported over the nation's transportation system has grown rapidly. At the same time, changes in the business sector have resulted in new demands for higher quality freight transportation service. Just-in-time manufacturing, e-commerce, and demand for small package service have resulted in smaller, but more frequent, individual shipments of high-value goods. As the number and frequency of shipments have increased, reliability has become more important. Shippers paying premium rates expect that their shipments will be delivered on time. Freight transportation today is also more complex than it was in the past. A single shipment might move across two or three modes of transportation en-route to its final destination. The rapid growth in freight transportation, the increasing emphasis on reliable freight transportation, and the relatively recent emergence of intermodal transportation have led to the emergence of freight transportation as a significant national issue. Congestion and lack of capacity are constraining the freight system leading to declining productivity of freight transportation system. This is occurring at the time that global trade and competition are putting new requirements on the system and the economy. As we look to the future, we must consider what steps need to be taken to address the needs of the freight transportation sector.

The freight transportation system includes a complex network of highways, railroads, waterways, airways, and pipelines. Facilities include marine terminals, airports, rail yards, truck depots, intermodal terminals, and a wide variety of loading and distribution facilities. Freight transportation carriers include trucking companies, shipping lines, railroads, airlines, pipeline companies, and integrated organizations that operate a range of modes of transportation. Several different federal government agencies are involved in many aspects of planning and developing our nation's freight transportation infrastructure. The U.S. Department of Transportation (U.S. DOT) plays the major role in supporting surface transportation, aviation, and maritime programs. The U.S. Army Corps of Engineers plans and funds waterway improvements such as dredging shipping channels. Other agencies, such as the Environmental Protection Agency and the Surface Transportation Board, have significant impacts on the characteristics of the freight transportation industry and freight infrastructure projects. Given the complexity of the freight transportation system and the wide variety of organizations that are involved in it, understanding the future needs of the freight transportation industry and financing freight transportation improvements are major challenges for public sector transportation professionals.

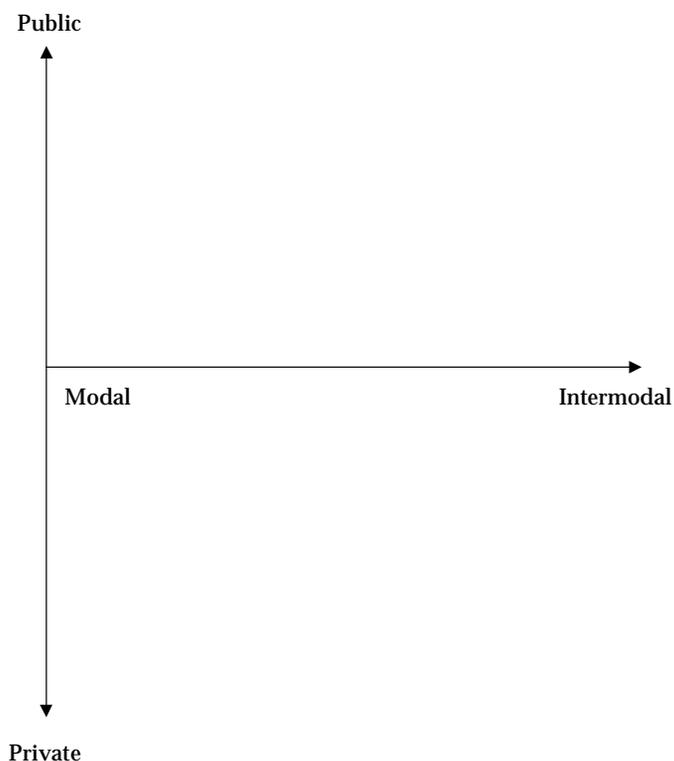
This paper provides an overview of the issues surrounding how freight projects are financed today and what might be needed in the future. The focus of the paper is the federal surface transportation program authorized under the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) and its predecessor, the Intermodal Surface Transportation

Efficiency Act (ISTEA). TEA-21 expires in 2003. Over the coming months U.S. DOT, together with its partners in state and local government and in the private sector, will be developing options for consideration by Congress when TEA-21 is reauthorized. The paper identifies some policy questions that need to be addressed and a range of options for funding freight transportation projects in the future.<sup>1</sup>

## Characteristics of Freight Transportation Projects

Freight transportation encompasses a wide range of transportation modes and organizations in both the public and private sectors. Similarly, freight projects take many different forms. Figure 1 depicts the range of forms that freight projects might take. Projects might be entirely public, entirely private, or somewhere in between. The high level of private sector involvement in freight transportation projects is a major factor distinguishing freight projects from other transportation projects. In addition, freight projects are often intermodal, meaning that they involve more than one mode of transportation. Each of these characteristics is discussed below in greater detail.

**Figure 1. Freight Project Typology for Financing**



<sup>1</sup>U.S. DOT has also undertaken an effort, known as the Marine Transportation System (MTS) initiative, to identify the future needs of the nation's marine transportation system. An important part of the initiative is to identify changing marine infrastructure needs and their relationship to the rest of the transportation system. See *An Assessment of the U.S. Marine Transportation System, Report to Congress*, U.S. Department of Transportation, September 1999.

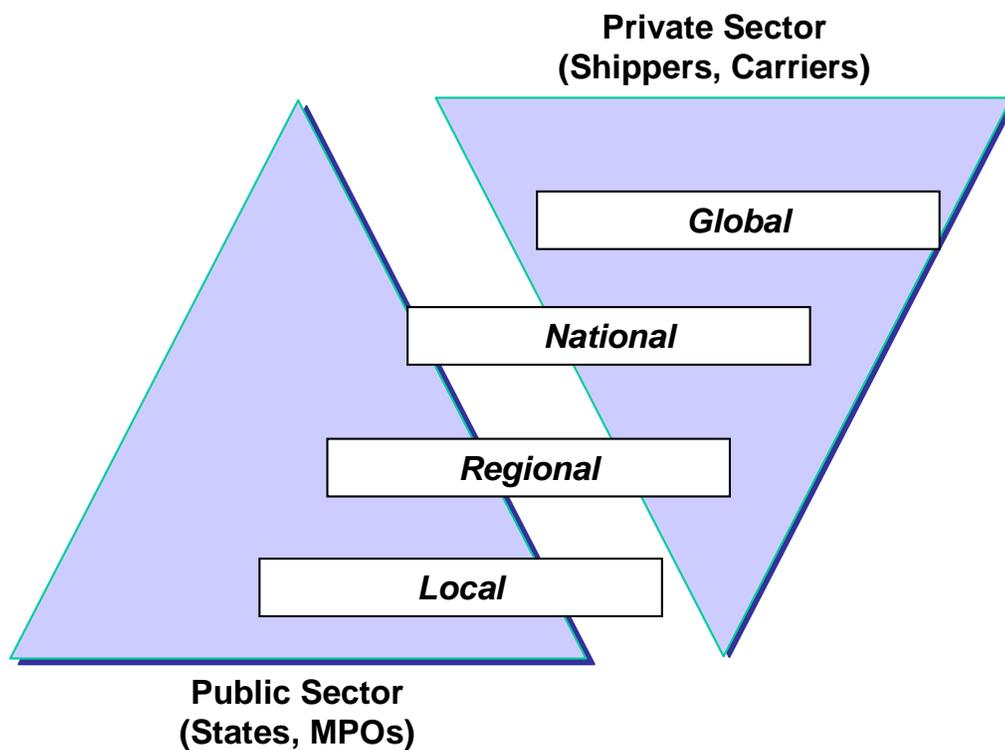
### ***Private Sector Ownership***

Virtually all freight transportation carriers are private companies, and they have a business perspective that is much broader than the typical public sector transportation agency. This is illustrated in Figure 2.

#### **Figure 2. Freight Transportation Perspectives:**

*State and MPO Focus Is Regional and Local;*

*Private Sector Focus Is Increasingly National and Global*



Under ISTEA and TEA-21, transportation planning and project selection is primarily a state and metropolitan responsibility. These agencies focus, understandably, on the needs and issues within their area of jurisdiction, and they oversee time-consuming, consensus-building processes to develop transportation improvement plans. Transportation carriers have a more global view of the transportation system. They might readily understand the implications of a traffic bottleneck in a given city, but will be less attuned to the other competing priorities that a metropolitan planning organization (MPO) or state department of transportation (DOT) might have to consider in deciding whether to do anything about it. They also have little patience with the time involved in a public planning process when they operate in a faster paced, competitive business environment. As a result, the private sector might be reluctant to get involved in the public planning process. However, their participation is crucial to ensuring that freight transportation needs are addressed.

Both the public and the private sectors have invested in the freight transportation network. The public (federal, state, and local) sector has invested heavily in the nation's highway network; and the private sector has invested heavily in the rail freight system

and the marine transportation system. Both have invested in projects that benefit the other.

For example, the public sector has invested in roadways connecting to private terminals (rail, air, truck, marine, and pipeline) to stimulate economic growth, reduce congestion and pollution, and improve public safety – investments that clearly benefit private terminal owners as well. The private sector also has invested in access roads and interchanges to the National Highway System to reduce their costs, increase productivity, and improve profits – investments that also stimulate economic growth, reduce congestion, and improve public safety. Investing in roadway connections to freight railroad and other intermodal terminals can be viewed as benefiting both the public and private sectors, with direct and indirect benefits accruing to each sector.

The dual public/private nature of the country's transportation infrastructure creates a challenge for public agencies considering whether to provide support to projects owned by the private sector. That challenge is to ensure that there are public benefits for public investments and that they are not outweighed by the private benefits of public investments. There are an increasing number of cases where public investment has both public and private benefits. For example, the Maine Department of Transportation and the FHWA have argued for public investment in a rail infrastructure improvement project serving a private terminal because the project would divert a significant amount of truck traffic from the public highways, significantly reducing the DOT's highway maintenance costs. Recently, the Commonwealth of Virginia and the Norfolk Southern Railroad have discussed using public funds to build additional, intermodal-rail tracks paralleling I-81 through Virginia. This would reduce the number of highway lanes that the state would need to add to I-81 to keep up with the growing demand for truck-freight movement.

In both these examples, questions arise regarding whether the public agency would be benefiting one railroad over its competitors, and whether the public benefits are sufficient to justify public cost sharing for projects that benefit private industry. The trucking industry may also question whether railroads are being given preferential treatment from such public investments; while the railroads argue that truckers, who benefit from a publicly funded highway infrastructure, enjoy a significant advantage in “paying as they go,” rather than incurring considerable up-front capital costs.

The examples are raised, not as obstacles, but to enlighten the dialogue on public-private roles, responsibilities, and the potential for public-private funding partnerships that recognize the shared benefits of such projects.

### ***Intermodal Projects***

The majority of transportation projects, whether they are oriented toward freight or passengers, tend to be focused on a single mode of transportation. A project may involve widening a highway or reconfiguring an airport terminal. The planning and development of these projects is relatively straightforward. Generally, the project sponsor is a single entity, and the project is funded from clearly defined funding sources. For example, a highway project funded from the Federal-aid Highway Program would be planned, funded, and constructed according to clearly delineated guidelines that have been widely used throughout the country. It is usually sponsored by a state highway department, which would be responsible for all aspects of development.

A significant number of freight projects, however, are much more complicated than the more traditional modal projects. An example might involve a project designed to link transportation modes, such as improving a connector road between a marine terminal and a railroad yard or interstate highway. In this case, there is no clear “owner” of the project. Is it the responsibility of the marine terminal operator, the railroad, or the highway department to initiate planning and development? Who is responsible for assembling financing? The project might be eligible for surface transportation funds, but an argument can be made that the beneficiaries of the project – such as the marine terminal operator – should contribute financially to the project. These responsibilities can be clarified through discussion and negotiation, but the fact remains that the need to do so makes these projects more difficult than traditional projects involving a single mode.

The nature of the freight transportation industry, and its infrastructure and operational needs, means that freight projects identified as priorities have greater complexities than other transportation projects. This suggests that financing these projects is also a more complicated.

## ■ Existing Freight Financing Programs

Freight transportation improvements have been financed in recent years using five basic sources of funding:<sup>2</sup>

- Federal-aid apportionments and grants – these include federal funding distributed to the states on a formula basis as well as discretionary funds granted by the federal government;
- Federal credit programs – these include loans, loan guarantees, and lines of credit;
- State and local transportation funds;
- State and local credit programs – primarily state infrastructure banks; and
- Private sector financing.

Following is a discussion of the some of the more common public sector mechanisms used to finance freight projects.

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<sup>2</sup>Freight transportation improvements have been financed in recent years through a wide variety of programs and funding tools. For more information on the experience with financing freight infrastructure, see *Funding and Institutional Options for Freight Infrastructure Improvements*, Publication No. FHWA-OP-00-26, HOFM/8-00(1M)QE, U.S. Department of Transportation, Federal Highway Administration, August 2000. The report notes that sources of funding used to develop freight-related infrastructure range from public sector funds to a variety of public-private and private financing approaches.

## **Federal Financing Programs**

Federal funding assistance used to finance freight projects includes existing Federal-aid programs, federal grants, and credit programs. The major federal funding sources used for freight projects were authorized under ISTEA and TEA-21.

### ***ISTEA***

ISTEA, which was signed into law in 1991, was a major departure from prior surface transportation programs, changing the roles of the federal government and its state and local partners. ISTEA devolved control of transportation investment decisions to state and local government, based on the premise that these levels of government would know best how to identify transportation priorities and dedicate funding to them.

ISTEA also established a specific link between transportation planning and project funding. States and MPOs were required to develop transportation improvement plans according to prescribed guidelines and use these as the basis for prioritizing projects and allocating federal funds to them. The plans were required to meet transportation requirements and conform to the requirements of the Clean Air Act.

Funding flexibility was another characteristic of ISTEA. Funds were distributed to the states in broad program categories. The states were given the flexibility to allocate funds to a wide variety of projects and, within limits, to shift funds among categories.

These changes removed many of the modal barriers to state and local transportation investments. State and local governments could trade off investments between highways and transit to build the most effective portfolio of transportation systems and services for their state and metropolitan areas. In addition to lowering modal barriers at the state and local level, ISTEA gave emphasis to transportation as an integrated system rather than a collection of distinct and independent modes.

ISTEA also emphasized the importance of freight transportation. The preamble to the Act repeatedly called out the linkages among economic productivity, freight and goods movement, and intermodal transportation. Congress emphasized the importance of freight because it had seen the impressive improvements in carrier productivity that resulted from deregulation of the freight transportation industry in the late 1970s and early 1980s. Moreover, Congress understood the opportunities that a cost-efficient and competitive transportation system created for trade and economic development. After deregulation, the competitive environment reduced the modal and jurisdictional barriers affecting the freight industry. By encouraging cross-modal coordination in public and private freight planning and investment through ISTEA, Congress hoped to catalyze a further advance in national freight productivity.

Three categories created under ISTEA have been the primary ones used to fund freight projects.

The **Congestion Mitigation and Air Quality Program (CMAQ)**, a Federal-aid program, has been used for freight projects more than most other federal funding programs. However, there are limits on its applicability. To be eligible for funding under CMAQ, a project must reduce carbon monoxide or other specified air pollutants in a non-attainment

or maintenance area under the Clean Air Act. Freight projects that have received funding under CMAQ have been required to show reduced air emissions. However, as long as this condition is met, the program can be used to fund a wide range of freight transportation projects, including rail and other non-highway transportation projects not eligible under other sections of ISTEA.

The **Surface Transportation Program (STP)**, also a Federal-aid program, has been used for a range of highway-related freight projects. Roadway improvements to facilitate truck-freight movement on Federal-aid highways are eligible for funding under this program. Also eligible are improvements or changes to highways to accommodate other modes. STP funding has been used to raise and lengthen highway bridges so that double-stack rail trains can pass beneath them; to relocate a rail line to accommodate a highway widening; and to improve highway safety by grade-separating highways and rail lines. The key to eligibility under this program is that the project must in some way be related to highways.

ISTEA also called for designation of a **National Highway System (NHS)**. Congress recognized that the nation's transportation system was a major factor in maintaining the nation's international competitiveness and ensuring continued economic strength. Congress called for the identification of those highways, including Interstates and other primary arterials to be identified by the states and MPOs, that were critical to the economic well being and development of the nation. These NHS priority highways were eligible for a dedicated federal-aid funding category. The call for designation of the NHS also included a provision to identify intermodal connectors – highways and local roads linking the NHS to key intermodal facilities (e.g., ports, rail terminals, airports) – across all modes of transportation. Many of these roads are local roads that might otherwise not be eligible for Federal funding.

What ISTEA did not do was create a funding program dedicated specifically to freight projects. The funding flexibility of ISTEA made it possible to fund certain types of freight-specific projects; however, freight projects funded through ISTEA programs had to be identified as priorities within the state- and MPO-led planning processes. This was difficult for the states and MPOs because, while the project costs would be borne locally, the benefits of many freight projects extended well beyond the borders of a given state or metropolitan area. Building political constituencies for freight projects crossing political jurisdictions proved to be a major barrier.

ISTEA also did not explicitly authorize funding for certain types of freight projects, including rail-freight projects and marine terminal improvements. This means that the project sponsor of a rail-freight project needs to figure out how to qualify the project for funding indirectly, such as describing it as an air-quality enhancement project under CMAQ.

### ***TEA-21***

TEA-21, which was enacted in 1998, continued much of the basic framework of ISTEA. However, the debate leading to TEA-21 identified a number of shortfalls and lessons learned from the experience of ISTEA. As a result, TEA-21 provided new resources and tools to address freight needs at the federal, state, and local levels. It included four new programs that have been beneficial in meeting freight transportation needs.

The first two programs are the **National Corridor Planning and Development Program** and the **Coordinated Border Infrastructure Program**. These programs, which are federal discretionary grant programs, share an annual funding allocation of up to \$140 million. Funds are awarded annually through a competitive process. While these programs are not limited to freight projects, they have proven to be a good source of funding for them. There are three reasons for this. The first is that the programs are funded with resources over and above the regular formula allocations to the states. This provides states the opportunity to seek funding for freight projects without taking funds from other state and local priorities funded through the regular programs. The second reason is that the scope of the programs is national rather than state or local, better matching the scope of today's freight transportation systems. This enhances the competitiveness of freight projects since they often have benefits far beyond the border of a given state or metropolitan area. The third reason is that programs have been an important catalyst for action on the part of states and local governments to work with the private sector to address freight issues, particularly at international borders. The major shortcoming of these programs is that the need far surpasses the annual allocation funding the programs. The experience to date has been that applications received have far exceeded the funding available. In addition, the programs have been heavily earmarked by Congress through the annual appropriations process.

TEA-21 also created two new credit programs. The first of these is the **Transportation Infrastructure Finance and Innovation Act (TIFIA)**, which provides loans, loan guarantees, and lines of credit for large projects. The program is modeled after a loan provided for the Alameda Corridor Transportation Project, a truck and rail corridor project enhancing access to the ports of Los Angeles and Long Beach. To qualify for assistance under TIFIA, a project needs a source of revenue to cover debt service costs, and it must also be valued at over \$100 million. The eligibility criteria for the program are based on the framework of the federal highway funding programs, and as a result, most non-highway freight projects do not qualify. The program does allow assistance to be provided to publicly owned, intermodal, surface freight transportation facilities (other than seaports and airports), as long as those facilities are located adjacent to the NHS. These factors limit its applicability, but TIFIA is an important tool that can be used for financing freight projects that meet the program guidelines.

The second program, the **Rail Revitalization and Improvement Funding program (RRIF)**, is also a credit program, targeted specifically at providing credit for rail infrastructure and equipment. The program was established in law and regulations were developed to implement it; however, Congress has not provided appropriations to make loans or loan guarantees. As a result, applicants must pay an up-front fee – representing a percentage of the loan requested – in order to receive the loan. The Federal Railroad Administration (FRA) is currently evaluating several applications for this program and has held pre-application meetings with other interested groups.

TEA-21 addressed some but not all of the limitations in ISTEA as it relates to freight transportation. First, TEA-21 created national funding programs awarded annually for projects having national significance. The demand for funding under these programs illustrates clearly that they are addressing a significant need. Second, TEA-21 also provided limited support for a small number of rail projects through TIFIA and RRIF. This is a significant step despite the limitations on applicability and funding.

## State and Local Freight Financing Programs

At the state and local level, freight projects have been funded from existing funding programs, special taxing mechanisms, and public private partnerships.<sup>3</sup> Most ports and airports are state or local agencies and finance their operations through fees charged to users as well as general state and local taxes and revenues.

States have developed innovative programs to finance port and rail infrastructure. Florida, for example, created the Florida Seaport Transportation and Economic Development (FSTED) program, a matching grant program that provides funds for projects that will improve the movement and intermodal transportation of passengers or cargo in commerce and trade within Florida. The state also provided a \$10 million appropriation to fund a prioritized set of projects identified by the Florida Freight Stakeholders Task Force. Pennsylvania has established a Rail Freight Assistance Program, which provides matching grants for rail construction and rehabilitation. A number of other states have established infrastructure banks and revolving loan funds, which provide credit assistance for freight projects.

## ■ Effectiveness of Current Financing Programs

Neither ISTEA nor TEA-21 includes a funding program dedicated exclusively to freight transportation projects. Instead, states and MPOs are encouraged to give priority to freight projects and to fund them under the basic funding framework. Over the last 10 years, a large number of freight transportation projects have been proposed and many have received public funding support. However, a review of the experience to date in funding freight transportation improvements reveals two basic problems – the eligibility of freight projects for public financing assistance, and ensuring that they receive priority when funding decisions are made.

### Project Eligibility

There are a number of freight projects that simply do not fit within the guidelines of existing funding programs. The most significant limitations relate to the ability to fund rail freight projects. As a general rule, rail projects are eligible for federal-aid funding or grants only if the project has a positive impact on air quality in a non-attainment area, involves modifying a rail line to accommodate a Federal-aid highway project, or results in specified improvements in safety, such as eliminating grade crossings. Funds for these programs are limited and they address only a part of the need. There are more options for credit assistance for rail freight projects, notably TIFIA and RRIF. However, in the case of TIFIA, the project must be publicly owned; and in the case of RRIF, the project must be able to generate a revenue stream or have access to revenues from another source to cover debt service costs.

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<sup>3</sup>Ibid.

A second difficulty relating to project eligibility stems from the intermodal nature of many freight projects. The public sector funding programs are generally focused on a primary mode of transportation, such as highways in the NHS program, or a primary purpose, such as the improving air quality in the CMAQ program. This means is that a freight project must establish a nexus with that mode or purpose and build the project around it.

Some freight projects may require a broader range of funding than might be available under a single program. In this case, it may be necessary to combine funding from multiple programs to address a single project. While this is not necessarily an insurmountable obstacle, it does introduce a level of complexity that results in freight projects being more difficult to finance.

### **Prioritization of Freight Projects**

The second problem relates to the project prioritization and decision-making structure established in ISTEA and TEA-21. Under current law, most decisions on which projects receive funding are made by states and MPOs. They must find a way to balance competing demands for relatively scarce transportation funding. While there is little question over the need for freight projects, states and MPOs must consider these needs against priorities for other transportation projects. A common complaint is that “freight doesn’t vote,” and that freight projects, which may have broad benefits across the freight transportation system, cannot compete for funding against more localized, politically popular projects. The borders and corridors programs established in TEA-21 address this difficulty, but the programs have limited resources available. Nevertheless, the high level of demand for funds under these programs indicates that they fill an important need.

The difficulties experienced in giving priority to freight projects may also relate to the difficulties in funding eligibility discussed above. Many projects compete for the same pool of transportation funding resources. Given the difficulties often encountered in determining that freight projects are eligible, planners may choose to focus their efforts on other needed projects that are less trouble to get done.

Despite the priority given to freight transportation needs in ISTEA and TEA-21, the problems discussed above are significant impediments to financing freight improvement projects. Transportation planners and policy-makers have been creative in their interpretation of the existing programs, but they have reached the limit of what is possible under existing law. The question for reauthorization is whether the needs of freight transportation require a more focused approach.

## **■ Policy Questions**

Given the needs of the freight transportation industry and the limitations of ISTEA and TEA-21 in addressing them, it is necessary to define what program changes might be implemented when TEA-21 is reauthorized. The specific changes depend on answers to three policy questions that have emerged in recent years based on the experience gained in attempting to finance freight infrastructure projects.

- Should public funding be used to support projects in private ownership or under private control?
- Should there be a means of identifying and funding freight projects having national significance?
- Are the current funding levels sufficient for freight project needs, and is it necessary to identify new sources of funding for freight projects?

## **Public Support for Private Projects**

A major characteristic of the freight transportation system is the high level of involvement of the private sector. Most freight carriers are private companies, and they own or control significant components of the nation's freight transportation infrastructure such as rail lines and terminals. Privately owned or controlled infrastructure is typically not eligible for public funding support. The exceptions at the federal level have been the CMAQ program, which requires a nexus between the use of funds and improved air quality, and the credit programs, which require that the projects being supported have the ability to take on debt.

Moving forward, it is important to consider the question of whether other public funding programs should be broadened to include freight projects that are in private ownership. The rationale for doing so is that a project designed to improve access to a rail freight facility could have the additional benefit of alleviating congestion over a wide area. A rail project might also increase capacity for publicly funded commuter rail and intercity rail services. However, such a project might also provide a significant benefit to the railroad that owns and uses the facility. This raises a question about whether the project confers an advantage or provides a tangible benefit to a private company. If this is the case, an approach might be to establish a framework for cost sharing between the public and private sectors as is done under many CMAQ projects.

Under ISTEA and TEA-21, the federal funding programs have been used creatively to fund many freight projects, but they have probably been stretched to their limit. If more is to be done, it is essential to determine when public funds should be used to support private projects and under what terms.

## **Nationally Significant Projects**

The freight mandates of ISTEA and TEA-21 were successful in focusing state and federal attention on freight issues. There is a growing awareness at the state and local level of the importance of freight transportation and a push to link state and local transportation investment, especially freight transportation investment, to economic development.

However, the mismatch between the scale of freight transport operations (increasingly regional and global) and public sector jurisdictions (with ISTEA's emphasis on state and especially local control) means that some freight project may be beyond the means or the scope of states and MPOs. This raises the question of whether the federal government needs to take a more active role in large, nationally significant projects. The scope of pos-

sible federal activities could encompass planning, project selection, or funding. The major question is what constitutes a nationally significant project? Should the federal government limit its focus to certain types of projects or issues (e.g., large projects) and leave smaller more local projects to state and local governments? If the federal government does limit its focus, what should be the criteria for defining national significance?

## **Funding Levels and Funding Sources**

The continued growth of congestion, particularly in metropolitan areas, has been felt throughout the transportation system, and freight transportation has been affected as well. For freight, the costs of congestion are particularly significant in that they have a negative impact on the reliability and overall performance of the transportation system. This in turn has a negative impact on the ability of the freight transportation system to accommodate the continuing growth in demand, and ultimately, it affects the nation's economic competitiveness.

Many potential solutions to the congestion problem have been identified, including new technology applications focused on managing the transportation system as well as the more traditional approach of expanding capacity. Both approaches require funding and financing programs to pay for the needed improvements. Two related questions are raised.

The first question is whether the overall level of funding provided to freight projects is sufficient to meet the anticipated needs. Most people in the freight industry feel strongly that insufficient public funding resources are being provided to address freight needs. What is the likelihood of increasing funding levels, and more to the point, what is the likelihood of ensuring that freight projects receive their fair share?

The second question is whether the current sources of funding under ISTEA and TEA-21 should be expanded. The major funding source for federal surface transportation programs has been fuel taxes paid into the Highway Trust Fund. Freight projects extend well beyond the nation's highway system and a question is raised over whether it is appropriate to fund non-highway freight projects from highway sources.

Freight transportation has been identified as an essential factor for maintaining the nation's economic health and competitiveness, and it is essential that adequate funding be made available for freight projects. While the freight transportation industry and transportation agencies might agree on that broad objective, reaching agreement on where the money should come from will be much more difficult.

## ■ **Future Financing Options**

The policy questions discussed above deal with what sorts of projects should be funded and who should pay for them. As those questions are debated and ultimately resolved, it will also be important to address the framework of the federal financing programs – how the funds are allocated and the programs administered. These decisions also have an impact on any attempt to address freight transportation needs.

A range of potential options is available to address the problems that currently are encountered when attempting to finance freight transportation projects under existing federal programs. A modest step would be to address the problems with project eligibility by expanding the eligibility guidelines of existing programs to cover a wider variety of freight projects. Another approach would be to create a funding program specifically for freight projects. A third option would involve an incentive-based program to encourage that priority be given to freight projects. Each of these options is discussed below in greater detail.

### **Expanded Project Eligibility**

One of the difficulties in financing freight projects is that many projects do not fit within the eligibility guidelines of current transportation funding programs. A logical solution to this problem would be to expand eligibility criteria to cover a broader range of freight projects. This could be done by adding specific types of freight projects (e.g., rail infrastructure) to the eligibility guidelines of existing federal funding programs. This would make it possible for states and MPOs to fund freight projects identified as priorities through the transportation planning process.

The advantage of this approach is that it works within the basic framework established in ISTEA and TEA-21 and builds on the concept of funding flexibility. It is based on the premise that states and MPOs are in the best position to evaluate the importance of freight transportation needs and to determine how what freight projects are needed. A disadvantage of this approach is that it does not address the reality that many freight transportation issues are broader in scope than a single state or metropolitan area. As discussed earlier, a common complaint among freight transportation carriers is that this characteristic makes it difficult for freight projects to compete against other, more localized priorities for funding. The approach also does not address the intermodal nature of freight projects since existing funding mechanisms, with the exception of TIFIA, tend to be modally focused.

One question with this approach is how far expanded flexibility should go. Rail freight is one candidate, and the experience of recent years suggests that there is significant interest in better financing tools for rail freight projects. Freight terminal improvements might be another possibility. Expanding eligibility guidelines to cover enhancing the capacity of marine terminals and airfreight facilities, for example, could result in significant efficiencies throughout the entire transportation system.

Whether to expand eligibility guidelines also raises questions about the source of funding. In past debates, there has been significant opposition to the use of the highway trust fund to fund non-highway improvements. Should this be reconsidered in the future, it will also be important to consider whether funding sources should be broadened as well.

### **Freight Set-Asides**

An alternative to expanding project eligibility would be to establish a specific freight program or programs within the surface transportation program. This could be a category within the formula allocations to states or a larger, nationally administered program. In

either case, a specific funding program would be developed and a specified level of funds allocated to it. The program guidelines would allow for a broad range of freight projects.

This approach addresses two of the major difficulties encountered in financing freight projects today. First, since freight projects would have a dedicated pool of funding, they would no longer need to compete for funding against other non-freight priorities. This would ensure that at least some freight projects receive funding. Second, a freight-focused program, to be most effective in meeting freight needs, would need to be intermodal. This would address the difficulties encountered in fitting intermodal projects into modally focused funding categories. However, a set-aside program runs counter to the flexibility that is the hallmark of ISTEA and TEA-21 and could result in funds being allocated to marginally important freight projects while other, more significant needs go unmet.

Where the program is administered is also a question. The program could be included as a category within formula allocations to the states. This would maintain the basic structure of ISTEA and TEA-21 and would reflect the view that many freight projects are local, such a connector to a terminal. On the other hand, administering the program at the state and metropolitan level would require freight carriers and users to participate in multiple planning processes in order to address the needs they have across the nation. In addition, at least a few states would view a freight set-aside as an unwelcome federal mandate that negatively affects their ability to address their unique transportation needs.

It is also possible to establish a freight funding program at the national level, modeled on the borders and corridors programs included in TEA-21. This would better match the national and global focus of the freight transportation industry and would reflect the importance of freight transportation to the economy as a whole. It would be important to establish the program as a complement to decisions made at the state and local level, not a replacement for them. The program would need to be a discretionary program to give U.S. DOT the flexibility to identify and fund projects as the need presents itself. However, a large, federally administered discretionary program would be an attractive target for Congressional earmarking, which would compromise the effectiveness of the program overall.

## **Incentive Programs**

The two approaches discussed above reflect two ends of a range of possible program structures. Expanding eligibility might be viewed as more of an enabling approach in that it provides states and MPOs needed tools, but leaves specific decisions to them. The framework of ISTEA and TEA-21 is based on the premise that transportation planners need maximum flexibility to address the nation's transportation needs and that states and MPOs are best positioned to make project decisions. Freight set-asides are a more directive approach that requires that funds be allocated in specific ways. This approach would make sense if the existing decision-making structures cannot find a way to fund freight transportation projects. A third approach could be to develop incentive-based programs to encourage better freight transportation planning and to facilitate project financing.

Incentive programs can take many forms, some of which might be beyond the scope of the surface transportation program. The TEA-21 borders and corridors programs are incentive programs in the sense that they are discretionary programs awarded through a com-

petitive process. Another promising area would be to support planning and project activities of multi-state or regional planning organizations that look beyond the boundaries of traditional states and metropolitan areas.

The I-95 Corridor Coalition launched an intermodal freight and passenger program covering the 12 states from Maine to Virginia and recently sponsored a Mid-Atlantic Rail Operations project to look at the tradeoff between highway and rail investment in the congested and capacity-constrained corridor between the New York-Northern New Jersey region and Virginia. The southeast states pooled funds for the Latin America Trade and Transportation Study, which evaluated the capacity of the region's highway, rail, and port systems to serve the growing demand for freight movement between the U.S. and Latin America. The Pacific Northwest states and British Columbia have funded a series of studies examining economic development strategies and freight movement needs along the I-5 corridor. And the eight states along I-10 from Florida to California are considering a joint effort to improve cross-country truck movement and access to ports along the corridor. However, these initiatives have been difficult to launch and maintain. Multi-state programs – whether organized around trade areas or corridors – fall awkwardly between the constitutional jurisdictions of the federal government and the states. Without a constitutional mandate and dedicated funding, the multistate programs are sustained precariously by consensus, Congressional earmarks, and short-term, pooled funding agreements.

Incentives provided to multi-state and regional organizations might include funding to support freight planning or financing for projects that meet certain criteria, such as involving multiple states or modes. A nationally administered freight funding program could be administered as an incentive program by providing funds to augment state and local funds if certain conditions are met.

The advantage of incentive programs is that they serve as encouragement rather than rigid direction. They reward but do not require the desired activities. However, it is important that incentive be tangible and significant enough to address the need. While planning support is needed, funding issues also need to be addressed.

## Recent Policy Proposals

In December 2000, the Secretary of Transportation transmitted a report to Congress on the NHS intermodal freight connectors.<sup>4</sup> The study, which was mandated in TEA-21, evaluated the condition of the NHS connectors, reviewed planned improvements and investments, and identified impediments and options to improving the intermodal freight connectors. The report suggested that a series of funding options be evaluated prior to the reauthorization of TEA-21. While the options are focused on the intermodal connectors, they provide some examples of the three financing options described above.

1. Establish new federal credit program, similar to TIFIA, targeted at smaller intermodal connector projects [*freight set-aside*];

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<sup>4</sup> *NHS Intermodal Freight Connectors, Report to Congress*, U.S. Department of Transportation, July 2000.

2. Expand the eligibility of the Railroad Rehabilitation and Improvement Financing credit program to include intermodal connector projects [*expanded project eligibility*];
3. Expand or strengthen the State Infrastructure Banks program, to allow for the capitalization of an intermodal freight connectors account with Federal-aid [*expanded project eligibility*];
4. Encourage the creation of state-level credit programs or infrastructure funds for intermodal freight connector projects [*incentive program*];
5. Connector incentive grants to overcome some of the problems encountered by the states and local areas in funding freight improvements [*incentive program*];
6. Reducing the match required for Federal funds where connectors under local ownership do not have the resources [*incentive program*]; and
7. Set aside NHS funds for intermodal connector projects [*freight set-aside*].

These proposals serve as a useful starting point for identifying a range of financing options designed to address the full range of freight transportation projects.

## ■ Conclusion

Freight transportation is an essential element of the nation's transportation system and has far reaching impacts throughout the economy. The financing needs of freight projects are different from and in many ways more complex than traditional transportation projects. ISTEA and TEA-21 identified freight transportation as a priority, but did not provide the resources to address fully the project needs for moving freight. The state and metropolitan focus of ISTEA and TEA-21 does not correspond neatly to the national and global focus of the freight transportation industry. In addition, the freight transportation industry is made up of mostly private sector transportation carriers. Incorporating their project requirements into a public sector transportation planning process is difficult.

As a result of these factors, financing freight projects is a significant challenge. However, the nation's freight transportation needs require that these projects have access to the financing resources they require. As the Administration and Congress consider proposals for reauthorization of TEA-21, it will be necessary to give careful consideration to the needs of this important component of the transportation system and to formulate policy proposals that address them in the future.